

WHAT IS CLAIMED:

1. A process for monitoring the condition of a rotating belt in a paper or cardboard machine, comprising:
 - recording data related to a condition of the belt; and
 - creating an at least two-dimensional image of the belt condition from the recorded condition data,wherein the image depicts a condition characteristic in a machine travel direction and a condition characteristic in a machine crosswise direction.
2. The process in accordance with claim 1, wherein the rotating belt is one of a felt or wire.
3. The process in accordance with claim 1, wherein the condition data is recorded by a condition sensor system, and the image is created by an evaluation unit.
4. The process in accordance with claim 1, wherein the condition data represent at least one predetermined property of the belt.
5. The process in accordance with claim 4, wherein the at least one predetermined property of the belt is permeability.
6. The process in accordance with claim 1, wherein the image is created in the form of a map.
7. The process in accordance with claim 1, wherein the condition characteristic in the machine travel direction and the condition characteristic in the machine crosswise direction are depicted in the form of at least one of contour lines and color transitions.
8. The process in accordance with claim 1, wherein the at least two-dimensional image comprises a three-dimensional image.
9. The process in accordance with claim 8, wherein the three-dimensional image is depicted in the form of at least one of a three-dimensional grid, and a three-dimensional waterfall diagram.

10. The process in accordance with claim 1, further comprising scanning the belt in the machine crosswise direction.

11. The process in accordance with claim 10, wherein the scanning is conducted by a scanner.

12. The process in accordance with claim 10, wherein the scanning is performed over several minutes.

13. The process in accordance with claim 10, wherein the scanning is performed over a duration of at least one belt rotation.

14. The process in accordance with claim 10, wherein the scanning is performed over a duration of several belt rotations.

15. The process in accordance with claim 10, wherein the condition data are continuously recorded at a predetermined scanning rate.

16. The process in accordance with claim 10, wherein the condition data are recorded at a scanning rate in which a plurality of condition data is obtained during a belt rotation.

17. The process in accordance with claim 1, further comprising recording belt rotation concurrently with the recording of condition data.

18. The process in accordance with claim 17, wherein the belt rotation is recorded via a path measurement.

19. The process in accordance with claim 17, wherein the belt rotation is recorded via a time measurement.

20. The process in accordance with claim 17, wherein the belt rotation is recorded via at least one marking provided on or in the belt and a detection of a corresponding trigger signal.

21. The process in accordance with claim 1, wherein the condition data are recorded by at least one crosswise scanning of the belt conducted over a duration of several belt rotations.

22. The process in accordance with claim 1, wherein the condition data are recorded by several crosswise scans of the belt.

23. The process in accordance with claim 22, wherein the several crosswise scans are at least one of averaged and filtered.

24. The process in accordance with claim 1, wherein the condition data is correlated with at least one predetermined property of the paper or cardboard web.

25. The process in accordance with claim 1, wherein the recording is performed by a condition sensor system comprising at least one sensor.

26. The process in accordance with claim 25, wherein the condition sensor system comprises at least one of a plurality of sensors successively arranged in the machine crosswise direction and a plurality of sensors successively arranged in the crosswise direction.

27. The process in accordance with claim 1, wherein the belt includes at least one of an optical marking and a hole marking.

28. The process in accordance with claim 27, wherein the optical marking comprises a wire woven into the belt.

29. The process in accordance with claim 27, wherein at least one trigger sensor is positioned to detect the belt marking.

30. The process in accordance with claim 29, wherein the at least one trigger sensor emits a trigger signal.

31. The process in accordance with claim 1, wherein at least one trigger sensor is used on each side of the paper or cardboard machine.

32. The process in accordance with claim 1, wherein a plurality of condition sensors are assigned to a scanner.

33. An apparatus for monitoring the condition of a rotating belt used in a paper or cardboard machine in accordance with claim 1, comprising:

a condition sensor system for recording the condition data of the belt; and

an evaluation unit structured and arranged to create the at least two-dimensional image of the belt condition from the recorded condition data.

34. The apparatus in accordance with claim 33, further comprising a triggering element coupled to the belt and a trigger sensor positioned to detect the triggering element.

35. The apparatus in accordance with claim 33, wherein the condition sensor system comprises at least one sensor arranged to scan the belt in the machine crosswise direction.

36. An apparatus for monitoring the condition of a rotating belt in a paper or cardboard machine, comprising:

- a condition sensor system for recording data related to a condition of the belt; and

- an evaluation unit structured and arranged to create an at least two-dimensional image of the belt condition from the recorded condition data,

- wherein the image created depicts a condition characteristic in a machine travel direction and a condition characteristic in a machine crosswise direction.

37. The apparatus in accordance with claim 36, further comprising a triggering element coupled to the belt and a trigger sensor positioned to detect the triggering element.

38. The apparatus in accordance with claim 36, wherein the condition sensor system comprises at least one sensor arranged to scan the belt in the machine crosswise direction.